

SEQUENCE LISTING

<110> CHUGAI SEIYAKU KABUSHIKI KAISHA

<120> Nonhuman animal for constructing antibody and method and system of constructing antibody using the same

<130> C1-A0326P

<150> JP2004-107669

<151> 2004-03-31

<160> 10

<170> PatentIn version 3.1

<210> 1

<211> 1539

<212> DNA

<213> Baculovirus

<220>

<221> CDS

<222> (1).. (1539)

<223>

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tct gcc ttt gcg gcg gag cac tgc aac gcg caa atg aag acg ggt ccg	96
Ser Ala Phe Ala Ala Glu His Cys Asn Ala Gln Met Lys Thr Gly Pro	
20 25 30	

tac aag att aaa aac ttg gac att acc ccg ccc aag gaa acg ctg caa	144
Tyr Lys Ile Lys Asn Leu Asp Ile Thr Pro Pro Lys Glu Thr Leu Gln	

35	40	45	
aag gac gtg gaa atc acc atc gtg gag acg gac tac aac gaa aac gtg			192
Lys Asp Val Glu Ile Thr Ile Val Glu Thr Asp Tyr Asn Glu Asn Val			
50	55	60	
att atc ggc tac aag ggg tac tac cag gcg tat gcg tac aac ggc ggc			240
Ile Ile Gly Tyr Lys Gly Tyr Tyr Gln Ala Tyr Ala Tyr Asn Gly Gly			
65	70	75	80
tcg ctg gat ccc aac aca cgc gtc gaa gaa acc atg aaa acg ctg aat			288
Ser Leu Asp Pro Asn Thr Arg Val Glu Glu Thr Met Lys Thr Leu Asn			
85	90	95	
gtg ggc aaa gag gat ttg ctt atg tgg agc atc agg cag cag tgc gag			336
Val Gly Lys Glu Asp Leu Leu Met Trp Ser Ile Arg Gln Gln Cys Glu			
100	105	110	
gtg ggc gaa gag ctg atc gac cgt tgg ggc agt gac agc gac gac tgt			384
Val Gly Glu Glu Leu Ile Asp Arg Trp Gly Ser Asp Ser Asp Asp Cys			
115	120	125	
ttt cgc gac aac gag ggc cgc ggc cag tgg gtc aaa ggc aaa gag ttg			432
Phe Arg Asp Asn Glu Gly Arg Gly Gln Trp Val Lys Gly Lys Glu Leu			
130	135	140	
gtg aag cgg cag aat aac aat cac ttt gcg cac cac acg tgc aac aaa			480
Val Lys Arg Gln Asn Asn Asn His Phe Ala His His Thr Cys Asn Lys			
145	150	155	160
tcg tgg cga tgc ggc att tcc act tcg aaa atg tac agc agg ctc gag			528
Ser Trp Arg Cys Gly Ile Ser Thr Ser Lys Met Tyr Ser Arg Leu Glu			
165	170	175	
tgc cag gac gac acg gac gag tgc cag gta tac att ttg gac gct gag			576
Cys Gln Asp Asp Thr Asp Glu Cys Gln Val Tyr Ile Leu Asp Ala Glu			
180	185	190	

ggc aac ccc atc aac gtg acc gtg gac act gtg ctt cat cga gac ggc	624
Gly Asn Pro Ile Asn Val Thr Val Asp Thr Val Leu His Arg Asp Gly	
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gtg agt atg att ctc aaa caa aag tct acg ttc acc acg cgc caa ata	672
Val Ser Met Ile Leu Lys Gln Lys Ser Thr Phe Thr Thr Arg Gln Ile	
210 215 220	
aaa gct gcg tgt ctg ctc att aaa gat gac aaa aat aac ccc gag tcg	720
Lys Ala Ala Cys Leu Leu Ile Lys Asp Asp Lys Asn Asn Pro Glu Ser	
225 230 235 240	
gtg aca cgc gaa cac tgt ttg att gac aat gat ata tat gat ctt tct	768
Val Thr Arg Glu His Cys Leu Ile Asp Asn Asp Ile Tyr Asp Leu Ser	
245 250 255	
aaa aac acg tgg aac tgc aag ttt aac aga tgc att aaa cgc aaa gtc	816
Lys Asn Thr Trp Asn Cys Lys Phe Asn Arg Cys Ile Lys Arg Lys Val	
260 265 270	
gag cac cga gtc aag aag cgg ccg ccc act tgg cgc cac aac gtt aga	864
Glu His Arg Val Lys Lys Arg Pro Pro Thr Trp Arg His Asn Val Arg	
275 280 285	
gcc aag tac aca gag gga gac act gcc acc aaa ggc gac ctg atg cat	912
Ala Lys Tyr Thr Glu Gly Asp Thr Ala Thr Lys Gly Asp Leu Met His	
290 295 300	
att caa gag gag ctg atg tac gaa aac gat ttg ctg aaa atg aac att	960
Ile Gln Glu Glu Leu Met Tyr Glu Asn Asp Leu Leu Lys Met Asn Ile	
305 310 315 320	
gag ctg atg cat gcg cac atc aac aag cta aac aat atg ctg cac gac	1008
Glu Leu Met His Ala His Ile Asn Lys Leu Asn Asn Met Leu His Asp	
325 330 335	

ctg ata gtc tcc gtg gcc aag gtg gac gag cgt ttg att ggc aat ctc	1056
Leu Ile Val Ser Val Ala Lys Val Asp Glu Arg Leu Ile Gly Asn Leu	
340 345 350	
atg aac aac tct gtt tct tca aca ttt ttg tgc gac gac acg ttt ttg	1104
Met Asn Asn Ser Val Ser Ser Thr Phe Leu Ser Asp Asp Thr Phe Leu	
355 360 365	
ctg atg ccg tgc acc aat ccg ccg gca cac acc agt aat tgc tac aac	1152
Leu Met Pro Cys Thr Asn Pro Pro Ala His Thr Ser Asn Cys Tyr Asn	
370 375 380	
aac agc atc tac aaa gaa ggg cgt tgg gtg gcc aac acg gac tgc tgc	1200
Asn Ser Ile Tyr Lys Glu Gly Arg Trp Val Ala Asn Thr Asp Ser Ser	
385 390 395 400	
caa tgc ata gat ttt agc aac tac aag gaa cta gca att gac gac gac	1248
Gln Cys Ile Asp Phe Ser Asn Tyr Lys Glu Leu Ala Ile Asp Asp Asp	
405 410 415	
gtc gag ttt tgg atc ccg acc atc ggc aac acg acc tat cac gac agt	1296
Val Glu Phe Trp Ile Pro Thr Ile Gly Asn Thr Thr Tyr His Asp Ser	
420 425 430	
tgg aaa gat gcc agc ggc tgg tgc ttt att gcc caa caa aaa agc aac	1344
Trp Lys Asp Ala Ser Gly Trp Ser Phe Ile Ala Gln Gln Lys Ser Asn	
435 440 445	
ctc ata acc acc atg gag aac acc aag ttt ggc ggc gtc ggc acc agt	1392
Leu Ile Thr Thr Met Glu Asn Thr Lys Phe Gly Gly Val Gly Thr Ser	
450 455 460	
ctg agc gac atc act tcc atg gct gaa ggc gaa ttg gcc gct aaa ttg	1440
Leu Ser Asp Ile Thr Ser Met Ala Glu Gly Glu Leu Ala Ala Lys Leu	
465 470 475 480	
act tgc ttc atg ttt ggt cat gta gtt aac ttt gta att ata tta att	1488

Thr Ser Phe Met Phe Gly His Val Val Asn Phe Val Ile Ile Leu Ile
 485 490 495

gtg att tta ttt ttg tac tgt atg att aga aac cgt aat aga caa tat 1536
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taa 1539

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 <211> 512
 <212> PRT
 <213> Baculovirus

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Tyr Lys Ile Lys Asn Leu Asp Ile Thr Pro Pro Lys Glu Thr Leu Gln
 35 40 45

Lys Asp Val Glu Ile Thr Ile Val Glu Thr Asp Tyr Asn Glu Asn Val
 50 55 60

Ile Ile Gly Tyr Lys Gly Tyr Tyr Gln Ala Tyr Ala Tyr Asn Gly Gly
 65 70 75 80

Ser Leu Asp Pro Asn Thr Arg Val Glu Glu Thr Met Lys Thr Leu Asn
 85 90 95

Val Gly Lys Glu Asp Leu Leu Met Trp Ser Ile Arg Gln Gln Cys Glu
 100 105 110

Val Gly Glu Glu Leu Ile Asp Arg Trp Gly Ser Asp Ser Asp Asp Cys
 115 120 125

Phe Arg Asp Asn Glu Gly Arg Gly Gln Trp Val Lys Gly Lys Glu Leu
 130 135 140

Val Lys Arg Gln Asn Asn Asn His Phe Ala His His Thr Cys Asn Lys
 145 150 155 160

Ser Trp Arg Cys Gly Ile Ser Thr Ser Lys Met Tyr Ser Arg Leu Glu
 165 170 175

Cys Gln Asp Asp Thr Asp Glu Cys Gln Val Tyr Ile Leu Asp Ala Glu
 180 185 190

Gly Asn Pro Ile Asn Val Thr Val Asp Thr Val Leu His Arg Asp Gly
 195 200 205

Val Ser Met Ile Leu Lys Gln Lys Ser Thr Phe Thr Thr Arg Gln Ile
 210 215 220

Lys Ala Ala Cys Leu Leu Ile Lys Asp Asp Lys Asn Asn Pro Glu Ser
 225 230 235 240

Val Thr Arg Glu His Cys Leu Ile Asp Asn Asp Ile Tyr Asp Leu Ser
 245 250 255

Lys Asn Thr Trp Asn Cys Lys Phe Asn Arg Cys Ile Lys Arg Lys Val
 260 265 270

Glu His Arg Val Lys Lys Arg Pro Pro Thr Trp Arg His Asn Val Arg
 275 280 285

Ala Lys Tyr Thr Glu Gly Asp Thr Ala Thr Lys Gly Asp Leu Met His
 290 295 300

Ile Gln Glu Glu Leu Met Tyr Glu Asn Asp Leu Leu Lys Met Asn Ile

305	310	315	320
Glu Leu Met His Ala His Ile Asn Lys Leu Asn Asn Met Leu His Asp			
	325	330	335
Leu Ile Val Ser Val Ala Lys Val Asp Glu Arg Leu Ile Gly Asn Leu			
	340	345	350
Met Asn Asn Ser Val Ser Ser Thr Phe Leu Ser Asp Asp Thr Phe Leu			
	355	360	365
Leu Met Pro Cys Thr Asn Pro Pro Ala His Thr Ser Asn Cys Tyr Asn			
	370	375	380
Asn Ser Ile Tyr Lys Glu Gly Arg Trp Val Ala Asn Thr Asp Ser Ser			
385	390	395	400
Gln Cys Ile Asp Phe Ser Asn Tyr Lys Glu Leu Ala Ile Asp Asp Asp			
	405	410	415
Val Glu Phe Trp Ile Pro Thr Ile Gly Asn Thr Thr Tyr His Asp Ser			
	420	425	430
Trp Lys Asp Ala Ser Gly Trp Ser Phe Ile Ala Gln Gln Lys Ser Asn			
	435	440	445
Leu Ile Thr Thr Met Glu Asn Thr Lys Phe Gly Gly Val Gly Thr Ser			
450	455	460	
Leu Ser Asp Ile Thr Ser Met Ala Glu Gly Glu Leu Ala Ala Lys Leu			
465	470	475	480
Thr Ser Phe Met Phe Gly His Val Val Asn Phe Val Ile Ile Leu Ile			
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 <213> Baculovirus

<220>
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 <222> (1).. (1464)
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 Ser Ala Phe Ala Ala Glu His Cys Asn Ala Gln Met Lys Thr Gly Pro
 20 25 30
 tac aag att aaa aac ttg gac att acc ccg ccc aag gaa acg ctg caa 144
 Tyr Lys Ile Lys Asn Leu Asp Ile Thr Pro Pro Lys Glu Thr Leu Gln
 35 40 45
 aag gac gtg gaa atc acc atc gtg gag acg gac tac aac gaa aac gtg 192
 Lys Asp Val Glu Ile Thr Ile Val Glu Thr Asp Tyr Asn Glu Asn Val
 50 55 60
 att atc ggc tac aag ggg tac tac cag gcg tat gcg tac aac ggc ggc 240
 Ile Ile Gly Tyr Lys Gly Tyr Tyr Gln Ala Tyr Ala Tyr Asn Gly Gly
 65 70 75 80
 tcg ctg gat ccc aac aca cgc gtc gaa gaa acc atg aaa acg ctg aat 288
 Ser Leu Asp Pro Asn Thr Arg Val Glu Glu Thr Met Lys Thr Leu Asn
 85 90 95

gtg ggc aaa gag gat ttg ctt atg tgg agc atc agg cag cag tgc gag Val Gly Lys Glu Asp Leu Leu Met Trp Ser Ile Arg Gln Gln Cys Glu 100 105 110	336
gtg ggc gaa gag ctg atc gac cgt tgg ggc agt gac agc gac gac tgt Val Gly Glu Glu Leu Ile Asp Arg Trp Gly Ser Asp Ser Asp Asp Cys 115 120 125	384
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gtg aag cgg cag aat aac aat cac ttt gcg cac cac acg tgc aac aaa Val Lys Arg Gln Asn Asn Asn His Phe Ala His His Thr Cys Asn Lys 145 150 155 160	480
tcg tgg cga tgc ggc att tcc act tcg aaa atg tac agc agg ctc gag Ser Trp Arg Cys Gly Ile Ser Thr Ser Lys Met Tyr Ser Arg Leu Glu 165 170 175	528
tgc cag gac gac acg gac gag tgc cag gta tac att ttg gac gct gag Cys Gln Asp Asp Thr Asp Glu Cys Gln Val Tyr Ile Leu Asp Ala Glu 180 185 190	576
ggc aac ccc atc aac gtg acc gtg gac act gtg ctt cat cga gac ggc Gly Asn Pro Ile Asn Val Thr Val Asp Thr Val Leu His Arg Asp Gly 195 200 205	624
gtg agt atg att ctc aaa caa aag tct acg ttc acc acg cgc caa ata Val Ser Met Ile Leu Lys Gln Lys Ser Thr Phe Thr Thr Arg Gln Ile 210 215 220	672
aaa gct gcg tgt ctg ctc att aaa gat gac aaa aat aac ccc gag tcg Lys Ala Ala Cys Leu Leu Ile Lys Asp Asp Lys Asn Asn Pro Glu Ser 225 230 235 240	720
gtg aca cgc gaa cac tgt ttg att gac aat gat ata tat gat ctt tct	768

Val Thr Arg Glu His Cys Leu Ile Asp Asn Asp Ile Tyr Asp Leu Ser	
245 250 255	
aaa aac acg tgg aac tgc aag ttt aac aga tgc att aaa cgc aaa gtc	816
Lys Asn Thr Trp Asn Cys Lys Phe Asn Arg Cys Ile Lys Arg Lys Val	
260 265 270	
gag cac cga gtc aag aag cgg ccg ccc act tgg cgc cac aac gtt aga	864
Glu His Arg Val Lys Lys Arg Pro Pro Thr Trp Arg His Asn Val Arg	
275 280 285	
gcc aag tac aca gag gga gac act gcc acc aaa ggc gac ctg atg cat	912
Ala Lys Tyr Thr Glu Gly Asp Thr Ala Thr Lys Gly Asp Leu Met His	
290 295 300	
att caa gag gag ctg atg tac gaa aac gat ttg ctg aaa atg aac att	960
Ile Gln Glu Glu Leu Met Tyr Glu Asn Asp Leu Leu Lys Met Asn Ile	
305 310 315 320	
gag ctg atg cat gcg cac atc aac aag cta aac aat atg ctg cac gac	1008
Glu Leu Met His Ala His Ile Asn Lys Leu Asn Asn Met Leu His Asp	
325 330 335	
ctg ata gtc tcc gtg gcc aag gtg gac gag cgt ttg att ggc aat ctc	1056
Leu Ile Val Ser Val Ala Lys Val Asp Glu Arg Leu Ile Gly Asn Leu	
340 345 350	
atg aac aac tct gtt tct tca aca ttt ttg tcg gac gac acg ttt ttg	1104
Met Asn Asn Ser Val Ser Ser Thr Phe Leu Ser Asp Asp Thr Phe Leu	
355 360 365	
ctg atg ccg tgc acc aat ccg ccg gca cac acc agt aat tgc tac aac	1152
Leu Met Pro Cys Thr Asn Pro Pro Ala His Thr Ser Asn Cys Tyr Asn	
370 375 380	
aac agc atc tac aaa gaa ggg cgt tgg gtg gcc aac acg gac tcg tcg	1200
Asn Ser Ile Tyr Lys Glu Gly Arg Trp Val Ala Asn Thr Asp Ser Ser	

385	390	395	400	
caa tgc ata gat ttt agc aac tac aag gaa cta gca att gac gac gac				1248
Gln Cys Ile Asp Phe Ser Asn Tyr Lys Glu Leu Ala Ile Asp Asp Asp				
	405	410	415	
gtc gag ttt tgg atc ccg acc atc ggc aac acg acc tat cac gac agt				1296
Val Glu Phe Trp Ile Pro Thr Ile Gly Asn Thr Thr Tyr His Asp Ser				
	420	425	430	
tgg aaa gat gcc agc ggc tgg tcg ttt att gcc caa caa aaa agc aac				1344
Trp Lys Asp Ala Ser Gly Trp Ser Phe Ile Ala Gln Gln Lys Ser Asn				
	435	440	445	
ctc ata acc acc atg gag aac acc aag ttt ggc ggc gtc ggc acc agt				1392
Leu Ile Thr Thr Met Glu Asn Thr Lys Phe Gly Gly Val Gly Thr Ser				
	450	455	460	
ctg agc gac atc act tcc atg gct gaa ggc gaa ttg gcc gct aaa ttg				1440
Leu Ser Asp Ile Thr Ser Met Ala Glu Gly Glu Leu Ala Ala Lys Leu				
465	470	475	480	
act tcg ttc atg ttt ggt cat gta				1464
Thr Ser Phe Met Phe Gly His Val				
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<211> 488

<212> PRT

<213> Baculovirus

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10

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Ser Ala Phe Ala Ala Glu His Cys Asn Ala Gln Met Lys Thr Gly Pro

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Tyr	Lys	Ile	Lys	Asn	Leu	Asp	Ile	Thr	Pro	Pro	Lys	Glu	Thr	Leu	Gln
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Lys	Asp	Val	Glu	Ile	Thr	Ile	Val	Glu	Thr	Asp	Tyr	Asn	Glu	Asn	Val
	50					55						60			
Ile	Ile	Gly	Tyr	Lys	Gly	Tyr	Tyr	Gln	Ala	Tyr	Ala	Tyr	Asn	Gly	Gly
65					70					75				80	
Ser	Leu	Asp	Pro	Asn	Thr	Arg	Val	Glu	Glu	Thr	Met	Lys	Thr	Leu	Asn
				85						90				95	
Val	Gly	Lys	Glu	Asp	Leu	Leu	Met	Trp	Ser	Ile	Arg	Gln	Gln	Cys	Glu
			100					105						110	
Val	Gly	Glu	Glu	Leu	Ile	Asp	Arg	Trp	Gly	Ser	Asp	Ser	Asp	Asp	Cys
		115					120						125		
Phe	Arg	Asp	Asn	Glu	Gly	Arg	Gly	Gln	Trp	Val	Lys	Gly	Lys	Glu	Leu
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Val	Lys	Arg	Gln	Asn	Asn	Asn	His	Phe	Ala	His	His	Thr	Cys	Asn	Lys
145					150						155				160
Ser	Trp	Arg	Cys	Gly	Ile	Ser	Thr	Ser	Lys	Met	Tyr	Ser	Arg	Leu	Glu
				165						170				175	
Cys	Gln	Asp	Asp	Thr	Asp	Glu	Cys	Gln	Val	Tyr	Ile	Leu	Asp	Ala	Glu
			180					185						190	
Gly	Asn	Pro	Ile	Asn	Val	Thr	Val	Asp	Thr	Val	Leu	His	Arg	Asp	Gly
		195					200						205		
Val	Ser	Met	Ile	Leu	Lys	Gln	Lys	Ser	Thr	Phe	Thr	Thr	Arg	Gln	Ile
	210						215						220		

Lys Ala Ala Cys Leu Leu Ile Lys Asp Asp Lys Asn Asn Pro Glu Ser
 225 230 235 240

Val Thr Arg Glu His Cys Leu Ile Asp Asn Asp Ile Tyr Asp Leu Ser
 245 250 255

Lys Asn Thr Trp Asn Cys Lys Phe Asn Arg Cys Ile Lys Arg Lys Val
 260 265 270

Glu His Arg Val Lys Lys Arg Pro Pro Thr Trp Arg His Asn Val Arg
 275 280 285

Ala Lys Tyr Thr Glu Gly Asp Thr Ala Thr Lys Gly Asp Leu Met His
 290 295 300

Ile Gln Glu Glu Leu Met Tyr Glu Asn Asp Leu Leu Lys Met Asn Ile
 305 310 315 320

Glu Leu Met His Ala His Ile Asn Lys Leu Asn Asn Met Leu His Asp
 325 330 335

Leu Ile Val Ser Val Ala Lys Val Asp Glu Arg Leu Ile Gly Asn Leu
 340 345 350

Met Asn Asn Ser Val Ser Ser Thr Phe Leu Ser Asp Asp Thr Phe Leu
 355 360 365

Leu Met Pro Cys Thr Asn Pro Pro Ala His Thr Ser Asn Cys Tyr Asn
 370 375 380

Asn Ser Ile Tyr Lys Glu Gly Arg Trp Val Ala Asn Thr Asp Ser Ser
 385 390 395 400

Gln Cys Ile Asp Phe Ser Asn Tyr Lys Glu Leu Ala Ile Asp Asp Asp
 405 410 415

Val Glu Phe Trp Ile Pro Thr Ile Gly Asn Thr Thr Tyr His Asp Ser
 420 425 430

Trp Lys Asp Ala Ser Gly Trp Ser Phe Ile Ala Gln Gln Lys Ser Asn
 435 440 445

Leu Ile Thr Thr Met Glu Asn Thr Lys Phe Gly Gly Val Gly Thr Ser
 450 455 460

Leu Ser Asp Ile Thr Ser Met Ala Glu Gly Glu Leu Ala Ala Lys Leu
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Thr Ser Phe Met Phe Gly His Val
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<213> Artificial

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gaattccacc atggttaagcg ctattggt

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<211> 33

<212> DNA

<213> Artificial

<220>

<223> an artificially synthesized primer sequence

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33

<210> 7

<211> 17

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<213> Artificial

<220>

<223> an artificially synthesized primer sequence

<400> 7

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17

<210> 8

<211> 24

<212> DNA

<213> Artificial

<220>

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<210> 9

<211> 1486

<212> DNA

<213> Baculovirus

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<221> CDS

<222> (2).. (1474)

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gcg gcg cat tct gcc ttt gcg gcg gag cac tgc aac gcg caa atg aag 97
 Ala Ala His Ser Ala Phe Ala Ala Glu His Cys Asn Ala Gln Met Lys
 20 25 30

acg ggt ccg tac aag att aaa aac ttg gac att acc ccg ccc aag gaa 145
 Thr Gly Pro Tyr Lys Ile Lys Asn Leu Asp Ile Thr Pro Pro Lys Glu
 35 40 45

acg ctg caa aag gac gtg gaa atc acc atc gtg gag acg gac tac aac 193
 Thr Leu Gln Lys Asp Val Glu Ile Thr Ile Val Glu Thr Asp Tyr Asn
 50 55 60

gaa aac gtg att atc ggc tac aag ggg tac tac cag gcg tat gcg tac 241
 Glu Asn Val Ile Ile Gly Tyr Lys Gly Tyr Tyr Gln Ala Tyr Ala Tyr
 65 70 75 80

aac ggc ggc tcg ctg gat ccc aac aca cgc gtc gaa gaa acc atg aaa 289
 Asn Gly Gly Ser Leu Asp Pro Asn Thr Arg Val Glu Glu Thr Met Lys
 85 90 95

acg ctg aat gtg ggc aaa gag gat ttg ctt atg tgg agc atc agg cag 337
 Thr Leu Asn Val Gly Lys Glu Asp Leu Leu Met Trp Ser Ile Arg Gln
 100 105 110

cag tgc gag gtg ggc gaa gag ctg atc gac cgt tgg ggc agt gac agc 385
 Gln Cys Glu Val Gly Glu Glu Leu Ile Asp Arg Trp Gly Ser Asp Ser
 115 120 125

gac gac tgt ttt cgc gac aac gag ggc cgc ggc cag tgg gtc aaa ggc 433
 Asp Asp Cys Phe Arg Asp Asn Glu Gly Arg Gly Gln Trp Val Lys Gly
 130 135 140

aaa gag ttg gtg aag cgg cag aat aac aat cac ttt gcg cac cac acg 481
Lys Glu Leu Val Lys Arg Gln Asn Asn Asn His Phe Ala His His Thr
145 150 155 160

tgc aac aaa tcg tgg cga tgc ggc att tcc act tcg aaa atg tac agc 529
Cys Asn Lys Ser Trp Arg Cys Gly Ile Ser Thr Ser Lys Met Tyr Ser
165 170 175

agg ctc gag tgc cag gac gac acg gac gag tgc cag gta tac att ttg 577
Arg Leu Glu Cys Gln Asp Asp Thr Asp Glu Cys Gln Val Tyr Ile Leu
180 185 190

gac gct gag ggc aac ccc atc aac gtg acc gtg gac act gtg ctt cat 625
Asp Ala Glu Gly Asn Pro Ile Asn Val Thr Val Asp Thr Val Leu His
195 200 205

cga gac ggc gtg agt atg att ctc aaa caa aag tct acg ttc acc acg 673
 Arg Asp Gly Val Ser Met Ile Leu Lys Gln Lys Ser Thr Phe Thr Thr
 210 215 220

cgc caa ata aaa gct gcg tgt ctg ctc att aaa gat gac aaa aat aac 721
Arg Gln Ile Lys Ala Ala Cys Leu Leu Ile Lys Asp Asp Lys Asn Asn
225 230 235 240

ccc gag tcg gtg aca cgc gaa cac tgt ttg att gac aat gat ata tat 769
Pro Glu Ser Val Thr Arg Glu His Cys Leu Ile Asp Asn Asp Ile Tyr
245 250 255

gat ctt tct aaa aac acg tgg aac tgc aag ttt aac aga tgc att aaa 817
Asp Leu Ser Lys Asn Thr Trp Asn Cys Lys Phe Asn Arg Cys Ile Lys
260 265 270

cgc aaa gtc gag cac cga gtc aag aag cgg ccg ccc act tgg cgc cac 865
 Arg Lys Val Glu His Arg Val Lys Lys Arg Pro Pro Thr Trp Arg His
 275 280 285

aac gtt aga gcc aag tac aca gag gga gac act gcc acc aaa ggc gac	913
Asn Val Arg Ala Lys Tyr Thr Glu Gly Asp Thr Ala Thr Lys Gly Asp	
290 295 300	
ctg atg cat att caa gag gag ctg atg tac gaa aac gat ttg ctg aaa	961
Leu Met His Ile Gln Glu Glu Leu Met Tyr Glu Asn Asp Leu Leu Lys	
305 310 315 320	
atg aac att gag ctg atg cat gcg cac atc aac aag cta aac aat atg	1009
Met Asn Ile Glu Leu Met His Ala His Ile Asn Lys Leu Asn Asn Met	
325 330 335	
ctg cac gac ctg ata gtc tcc gtg gcc aag gtg gac gag cgt ttg att	1057
Leu His Asp Leu Ile Val Ser Val Ala Lys Val Asp Glu Arg Leu Ile	
340 345 350	
ggc aat ctc atg aac aac tct gtt tct tca aca ttt ttg tcg gac gac	1105
Gly Asn Leu Met Asn Asn Ser Val Ser Ser Thr Phe Leu Ser Asp Asp	
355 360 365	
acg ttt ttg ctg atg ccg tgc acc aat ccg ccg gca cac acc agt aat	1153
Thr Phe Leu Leu Met Pro Cys Thr Asn Pro Pro Ala His Thr Ser Asn	
370 375 380	
tgc tac aac aac agc atc tac aaa gaa ggg cgt tgg gtg gcc aac acg	1201
Cys Tyr Asn Asn Ser Ile Tyr Lys Glu Gly Arg Trp Val Ala Asn Thr	
385 390 395 400	
gac tcg tcg caa tgc ata gat ttt agc aac tac aag gaa cta gca att	1249
Asp Ser Ser Gln Cys Ile Asp Phe Ser Asn Tyr Lys Glu Leu Ala Ile	
405 410 415	
gac gac gac gtc gag ttt tgg atc ccg acc atc ggc aac acg acc tat	1297
Asp Asp Asp Val Glu Phe Trp Ile Pro Thr Ile Gly Asn Thr Thr Tyr	
420 425 430	
cac gac agt tgg aaa gat gcc agc ggc tgg tcg ttt att gcc caa caa	1345

His Asp Ser Trp Lys Asp Ala Ser Gly Trp Ser Phe Ile Ala Gln Gln
 435 440 445

aaa agc aac ctc ata acc acc atg gag aac acc aag ttt ggc ggc gtc 1393
 Lys Ser Asn Leu Ile Thr Thr Met Glu Asn Thr Lys Phe Gly Gly Val
 450 455 460

ggc acc agt ctg agc gac atc act tcc atg gct gaa ggc gaa ttg gcc 1441
 Gly Thr Ser Leu Ser Asp Ile Thr Ser Met Ala Glu Gly Glu Leu Ala
 465 470 475 480

gct aaa ttg act tcg ttc atg ttt ggt cat gta taatgagaat tc 1486
 Ala Lys Leu Thr Ser Phe Met Phe Gly His Val
 485 490

<210> 10
 <211> 491
 <212> PRT
 <213> Baculovirus

<400> 10

Asn Ser Thr Met Val Ser Ala Ile Val Leu Tyr Val Leu Leu Ala Ala
 1 5 10 15

Ala Ala His Ser Ala Phe Ala Ala Glu His Cys Asn Ala Gln Met Lys
 20 25 30

Thr Gly Pro Tyr Lys Ile Lys Asn Leu Asp Ile Thr Pro Pro Lys Glu
 35 40 45

Thr Leu Gln Lys Asp Val Glu Ile Thr Ile Val Glu Thr Asp Tyr Asn
 50 55 60

Glu Asn Val Ile Ile Gly Tyr Lys Gly Tyr Tyr Gln Ala Tyr Ala Tyr
 65 70 75 80

Asn Gly Gly Ser Leu Asp Pro Asn Thr Arg Val Glu Glu Thr Met Lys
 85 90 95

Thr Leu Asn Val Gly Lys Glu Asp Leu Leu Met Trp Ser Ile Arg Gln
 100 105 110

Gln Cys Glu Val Gly Glu Glu Leu Ile Asp Arg Trp Gly Ser Asp Ser
 115 120 125

Asp Asp Cys Phe Arg Asp Asn Glu Gly Arg Gly Gln Trp Val Lys Gly
 130 135 140

Lys Glu Leu Val Lys Arg Gln Asn Asn Asn His Phe Ala His His Thr
 145 150 155 160

Cys Asn Lys Ser Trp Arg Cys Gly Ile Ser Thr Ser Lys Met Tyr Ser
 165 170 175

Arg Leu Glu Cys Gln Asp Asp Thr Asp Glu Cys Gln Val Tyr Ile Leu
 180 185 190

Asp Ala Glu Gly Asn Pro Ile Asn Val Thr Val Asp Thr Val Leu His
 195 200 205

Arg Asp Gly Val Ser Met Ile Leu Lys Gln Lys Ser Thr Phe Thr Thr
 210 215 220

Arg Gln Ile Lys Ala Ala Cys Leu Leu Ile Lys Asp Asp Lys Asn Asn
 225 230 235 240

Pro Glu Ser Val Thr Arg Glu His Cys Leu Ile Asp Asn Asp Ile Tyr
 245 250 255

Asp Leu Ser Lys Asn Thr Trp Asn Cys Lys Phe Asn Arg Cys Ile Lys
 260 265 270

Arg Lys Val Glu His Arg Val Lys Lys Arg Pro Pro Thr Trp Arg His
 275 280 285

Asn Val Arg Ala Lys Tyr Thr Glu Gly Asp Thr Ala Thr Lys Gly Asp
 290 295 300

Leu Met His Ile Gln Glu Glu Leu Met Tyr Glu Asn Asp Leu Leu Lys
 305 310 315 320

Met Asn Ile Glu Leu Met His Ala His Ile Asn Lys Leu Asn Asn Met
 325 330 335

Leu His Asp Leu Ile Val Ser Val Ala Lys Val Asp Glu Arg Leu Ile
 340 345 350

Gly Asn Leu Met Asn Asn Ser Val Ser Ser Thr Phe Leu Ser Asp Asp
 355 360 365

Thr Phe Leu Leu Met Pro Cys Thr Asn Pro Pro Ala His Thr Ser Asn
 370 375 380

Cys Tyr Asn Asn Ser Ile Tyr Lys Glu Gly Arg Trp Val Ala Asn Thr
 385 390 395 400

Asp Ser Ser Gln Cys Ile Asp Phe Ser Asn Tyr Lys Glu Leu Ala Ile
 405 410 415

Asp Asp Asp Val Glu Phe Trp Ile Pro Thr Ile Gly Asn Thr Thr Tyr
 420 425 430

His Asp Ser Trp Lys Asp Ala Ser Gly Trp Ser Phe Ile Ala Gln Gln
 435 440 445

Lys Ser Asn Leu Ile Thr Thr Met Glu Asn Thr Lys Phe Gly Gly Val
 450 455 460

Gly Thr Ser Leu Ser Asp Ile Thr Ser Met Ala Glu Gly Glu Leu Ala
 465 470 475 480

Ala Lys Leu Thr Ser Phe Met Phe Gly His Val
 485 490